



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,936	11/02/2000	Lee A Neitzel	06005/35528	4816

7590 07/12/2007
Roger A Heppermann
Marshall O'Toole Gerstein Murray & Borun
6300 Sears Tower
233 South Wacker Drive
Chicago, IL 60606-6402

EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

07/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

5

Office Action Summary

Application No.

09/704,936

Applicant(s)

NEITZEL ET AL.

Examiner

Andrew C. Lee

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 - 6,8 - 18,21 - 32,34 - 41,43 - 50,52 - 57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 - 6,8 - 18,21 - 32,34 - 41,43 - 50,52 - 57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims 1, 3 – 6, 8 – 18, 21 – 32, 34 – 41, 43 – 50, 52 – 57 are pending.
2. Claims 2, 7, 19, 20, 21, 33, 42, 51 had been canceled.

Claim Objections

3. Claims 19 – 21 are objected to because of the following informalities:

Regarding claims 19 – 21, claims 19 – 21 had been canceled. However, claim 21 is still intact. Therefore claim 21 (page 5 of the amendment) should be canceled and deleted from the amendment, or "claims 19 – 21" is a typo (claims 19 – 20?). Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3 – 6, 8 – 18, 21 – 32, 34 – 41, 43 – 50, 52 – 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebowitz et al. (US 5812545) in view of (Ben-Schachar et al. (US 6209018 B1).

Regarding claims 1, 44, Liebowitz et al. disclose the limitation of a method of transmitting data through a communication link having a bandwidth using a plurality of communication connections ("organizes bursts in at least one of a plurality of lots constituting a time division multiple access (TDMA) frame,...and dynamic assignment of slots depends on the committed information rates (CIR)" correlates to a bandwidth using a plurality of communication connections; column 2, lines 40 – 62, Fig. 7B, Fig. 2, column 5, lines 58 – 64); the method comprising the steps of: establishing a worker object for each one of the communication connections ("processing data flow and functions performed within programmable computing device (PCD), and support different formats and a multiplicity of communication ports" correlates to establishing a worker object for each one of the communication connections; Fig. 4, column 4, lines 15 – 29, 37 – 39, lines 51 – 54); distributing the data amongst the worker objects ("modules to support different formats and a multiplicity of communication ports, ...creates an outgoing data queue corresponding to each user access device for storing data received therefrom" correlates to distributing the data amongst the worker objects; Fig. 4, column 4, lines 32 – 47); forming messages using the distributed data within each worker object and a parameter of that worker object ("collection of fragments is called the payload" correlates to forming messages using the distributed data within each worker object, and "payload header which identifies the location of each fragment" correlates to a parameter of that worker object; column 4, lines 52 – 67); and delivering the messages to an underlying layer of the plurality of communication connections so that each communication connection uses no more than a predetermined portion of the bandwidth (recited "fragment identifier relating a fragment to the frame from which it was derived and the burst buffer also stores bandwidth requests for

transmissions" correlates to delivering the messages to an underlying layer of the plurality of communication connections so that each communication connection uses no more than a predetermined portion of the bandwidth; Fig. 7B and Fig. 4, column 4, lines 53 – 67).

Liebowitz et al. also disclose allocating a predetermined portion of the bandwidth to each of the plurality of communication connections ("data queue is preferably assigned its own CIR" correlates to allocating a predetermined portion of the bandwidth to each of the plurality of communication connections; Fig. 7B, column 5, lines 1 – 37; "the port CIR is a guaranteed bandwidth from the port" also correlates to allocating the predetermined portion of the bandwidth to each of the plurality of communication connections; column 16, lines 47 – 53) and setting a message size parameter ("the size of the burst buffer is set by the network-wide parameter, 'packet.length'"; column 4, lines 66 – 68; "formats queue size information, as well as stream request information" correlates to setting a message size parameter; column 6, lines 27 – 33) and a time between calls parameters for each of the plurality of communication connections ("sends a timing indicator to TMC indicating the precise time that it can transmit a burst; at specified times of transmission; silence intervals in voice conversations" correlates to a time between calls parameters; column 5, lines 50 – 67; column 6, lines 46 – 51; column 15, lines 21 – 28). Liebowitz et al. disclose implicitly establishing a worker object for each one of the communication connections, distributing the data amongst the worker objects; forming messages using the distributed data within each worker object and a parameter of that worker object ("processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects).

Liebowitz et al. do not disclose explicitly establishing a worker object for each one of the communication connections, distributing the data amongst the worker objects; forming messages using the distributed data within each worker object and a parameter of that worker object.

Ben-Schachar et al. teach explicitly establishing a worker object for each one of the communication connections, distributing the data amongst the worker objects; forming messages using the distributed data within each worker object and a parameter of that worker object (Fig. 4, column 8, lines 11 – 31, Fig. 27, column 26, lines 33 – 55)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Liebowitz et al. to include establishing a worker object for each one of the communication connections, distributing the data amongst the worker objects; forming messages using the distributed data within each worker object and a parameter of that worker object as taught by Ben-Schachar et al. in order to provide an improved method and apparatus for providing a service framework for a distributed object network system (as suggested by Ben-Schachar et al., see column 3, lines 26 – 28).

Regarding Claim 3, Liebowitz et al. disclose the method of claimed wherein the step of allocating the predetermined portion of the bandwidth to each of the plurality of communication connections (“data queue is preferably assigned its own CIR” correlates to allocating a predetermined portion of the bandwidth to each of the plurality of communication connections; Fig. 7B, column 5, lines 1 – 37; “the port CIR is a guaranteed bandwidth from the port” also correlates to allocating the predetermined portion of the bandwidth to each of the plurality of communication connections; column 16, lines 47– 53)

including the step of allocating different predetermined portions of the bandwidth to two of the plurality of communication connections ("a stream request is a request for a guaranteed amount of bandwidth, stream requests are usually made on behalf of voice and video calls" correlates to allocating different predetermined portions of the bandwidth to two of the plurality of communication connections; column 5, lines 58 – 62).

Regarding Claim 4, Liebowitz et al. disclose the method of claimed wherein the step of allocating the predetermined portion of the bandwidth to each of the plurality of communication connections including the step of setting a time between calls parameter for each of the plurality of communication connections ("data queue is preferably assigned its own CIR" correlates to allocating a predetermined portion of the bandwidth to each of the plurality of communication connections; Fig. 7B, column 5, lines 1 – 37; "the port CIR is a guaranteed bandwidth from the port" also correlates to allocating the predetermined portion of the bandwidth to each of the plurality of communication connections; column 16, lines 47 – 53; "sends a timing indicator to TMC indicating the precise time that it can transmit a burst; at specified times for transmission; silence intervals in voice conversations" correlates to a time between calls parameters; column 5, lines 50 – 67; column 6, lines 46 – 51; column 15, lines 21 – 28).

Regarding claims 5, 36, Liebowitz et al. disclose the method, system of claimed wherein the step of allocating the predetermined portion of the bandwidth to each of the plurality of communication connections including the step of setting a message size parameter for each of the plurality of communication connections ("data queue is preferably assigned its own CIR" correlates to allocating a predetermined portion of the bandwidth to

each of the plurality of communication connections; Fig. 7B, column 5, lines 1 – 37; “the port CIR is a guaranteed bandwidth from the port” also correlates to allocating the predetermined portion of the bandwidth to each of the plurality of communication connections; column 16, lines 47 – 53; “the size of the burst buffer is set by the network-wide parameter, ‘packet.length’”; column 4, lines 66 – 68; “formats queue size information, as well as stream request information” correlates to setting a message size parameter; column 6, lines 27 – 33).

Regarding claims 6, 28, 37, 45, 54, Liebowitz et al. disclose the limitation of the method, system of claimed wherein the step of allocating the predetermined portion on the bandwidth to each of the plurality of communication connections including the step of setting, a sending buffer size for each of the plurality of communication connections (“data queue is preferably assigned its own CIR” correlates to allocating a predetermined portion of the bandwidth to each of the plurality of communication connections; Fig. 7B, column 5, lines 1 – 37; “the port CIR is a guaranteed bandwidth from the port” also correlates to allocating the predetermined portion of the bandwidth to each of the plurality of communication connections; column 16, lines 47 – 53; “size of the burst buffer” correlates to sending buffer size for each of the plurality of communication connections; column 4, lines 63 – 67).

Regarding claims 8, 18, Liebowitz et al. disclose the method of claimed wherein the step of establishing the worker object for each one of the plurality of communication connections including the step of using the worker object to instantiate one of the plurality

of communication connections ("stores real time data from the outgoing data queues associated with ports configured to receive real time data in FIFO" correlates to establishing the worker object for each one of the plurality of communication connections including the step of using the worker object to instantiate one of the plurality of communication connections; column 5, lines 18 – 20; "processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects).

Regarding claim 9, Liebowitz et al. disclose the method of claimed further comprising the step of partitioning the data to form a plurality of partitioned data streams prior to distributing the data amongst the worker ("break each frame into smaller segments called fragments and stores as many fragments as possible in a burst buffer" correlates to partitioning the data to form a plurality of partitioned data streams prior to distributing the data amongst the worker; column 4, lines 51 – 56; "processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects).

Regarding claims 10, 31, 46, 47, 50, Liebowitz et al. disclose the method, system of claimed wherein the step of partitioning the data to form a plurality of partitioned data streams prior to distributing the data amongst the worker objects including the step of partitioning the data based on a type of data ("real time data and non real time data" correlates to partitioning the data based on a type of data; column 5, lines 7 – 22;

"processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects).

Regarding claims 11, 21, 48, Liebowitz et al. disclose claimed wherein the step of partitioning the data to form the plurality of partitioned data streams includes the step of establishing a one-to-one corresponding between the plurality of partitioned data streams and the worker objects (column 5, lines 18 – 28, "point-to-point connection"; column 16, lines 40 – 46; "processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects).

Regarding claims 12, 22, Liebowitz et al. disclose the method of claimed wherein the step of distributing the data amongst the worker objects including the step of transferring a subset of the data to one of the worker objects in response to a request for data from the one worker object ("all data streams share the burst buffer regardless of whether they contain voice, video or data" correlates to transferring a subset of the data to one of the worker objects in response to a request for data from the one worker object; column 16, lines 16 – 21; "processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects).

Regarding claims 13, 23, 30, Liebowitz et al. disclose the method of claimed wherein the step of distributing the data amongst the worker objects including the step of using a data transmission object ("processing data flow and functions performed, and Fragment Assembler/ Disassembler (FAD)" correlates to distributing the data amongst the worker

Art Unit: 2616

objects including the step of using a data transmission object; column 4, lines 15 – 50; “processing data flow and functions”; column 4, lines 15 – 24, “via software modules called agents”; column 8, lines 34 – 57, correlates to worker objects).

Regarding claims 14, 24, 25, 43, 52, Liebowitz et al. disclose the method, system of claimed wherein the step of forming the messages using the distributed data within each worker object including the step of forming the messages within each worker object using a parameter of that worker object that controls the size of the messages (element “frame.length” correlates to forming the messages within each worker object using a parameter of that worker object that controls the size of the messages; column 14, table I; “processing data flow and functions”; column 4, lines 15 – 24, “via software modules called agents”; column 8, lines 34 – 57, correlates to worker objects).

Regarding claims 15, 26, 34, Liebowitz et al. disclose the method, system of claimed wherein the step of delivering the messages formed within one of the worker objects including the step of delivering the messages formed within the one worker object to the underlying layer based on a parameter of the one worker object that affects the rate at which the messages are delivered to the underlying layer (“FAD examines each frame in accordance with the high level application protocol corresponding to the source of that frame “ correlates to delivering the messages formed within the one worker object to the underlying layer based on a parameter of the one worker object that affects the rate; column 6, lines 16 – 31; “processing data flow and functions”; column 4, lines 15 – 24, “via software modules called agents”; column 8, lines 34 – 57, correlates to worker objects).

Regarding claim 16, 27, 35, 56, Liebowitz et al. disclose wherein the step of delivering the messages formed within the one worker object to the underlying layer based on the parameter of one worker object that affects the rate at which the messages are delivered to the underlying layer includes the step of using a time between calls parameters ("FAD examines each frame in accordance with the high level application protocol corresponding to the source of that frame " correlates to delivering the messages formed within the one worker object to the underlying layer based on a parameter of the one worker object that affects the rate; column 6, lines 16 – 31; ("sends a timing indicator to TMC indicating the precise time that it can transmit a burst; at specified times of transmission; silence intervals in voice conversations" correlates to a time between calls parameters; column 5, lines 50 – 67; column 6, lines 46 – 51; column 15, lines 21 – 28; "processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects).

Regarding claims 17, 29, 57, Liebowitz et al. disclose the system of transmitting data through a communication link having a bandwidth using a plurality of communication connections ("organizes bursts in at least one of a plurality of lots constituting a time division multiple access (TDMA) frame,...and dynamic assignment of slots depends on the committed information rates (CIR)" correlates to a bandwidth using a plurality of communication connections; column 2, lines 40 – 62, Fig. 7B, Fig. 2, column 5, lines 58 – 64), the system comprising: a communication object that distributes the data amongst the plurality of communication connections (Fig. 4, element 66 FAD correlates to a

Art Unit: 2616

communication object; column 4, lines 39 – 56); a plurality of worker objects (“processing data flow and functions, support different formats and a multiplicity of communication ports” correlates to a plurality of worker objects; column 4, lines 37 – 39; “processing data flow and functions”; column 4, lines 15 – 24, “via software modules called agents”; column 8, lines 34 – 57, correlates to worker objects), wherein each worker object is associated with one of the communication connections and form messages using the data distributed to the communication connection associated with that worker object and a parameter of that work object (“collection of fragments is called the payload” correlates to forming messages using the distributed data within each worker object, and recited “payload header which identifies the location of each fragment” as a parameter of that worker object; column 4, lines 52 – 67), and wherein each worker object delivers the messages formed within that worker object to an underlying layer of the plurality of communication connections so that each communication connection uses no more than a predetermined portion of bandwidth allocated to that communication connection (“fragment identifier relating a fragment to the frame from which it was derived and the burst buffer also stores bandwidth requests for transmissions” correlates to delivering the messages to an underlying layer of the plurality of communication connections so that each communication connection uses no more than a predetermined portion of the bandwidth; Fig. 7B and Fig. 4, column 4, lines 53 – 67); wherein the communication object partitions the data to form a plurality of partitioned data streams prior to distributed the data amongst the plurality of communication connections (“real time data and non real time data” correlates to partitioning the data based on a type of data; column 5, lines 7 – 22); and wherein the communication object establishes a one-to-one correspondence between the plurality of partitioned data streams and the plurality of

worker objects ("processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects, "point-to-point connection"; column 16, lines 40 – 46).

Regarding claim 32, Liebowitz et al. disclose the system of claimed wherein each of the plurality of worker processes is based on a worker object ("created several burst buffers depending on the amount of data received from the user access devices via Frame Handler module" correlates to the plurality of worker processes is based on a worker object; "processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects).

Regarding Claims 38, 49, Liebowitz et al. disclose the system for transmitting data through a communication link comprising: a communication station having a processor and a memory communicatively coupled to the processor ("a processor having a digital memory device" correlates to having a processor and a memory communicatively coupled to the processor; column 21, lines 33 – 39), wherein the processor is programmed to provide a plurality of work objects that each ("said processor being operable to generate bursts using data received" correlates to programmed to provide a plurality of work objects; "processing data flow and functions"; column 4, lines 15 – 24, "via software modules called agents"; column 8, lines 34 – 57, correlates to worker objects), forms messages using one of a plurality of partitioned data streams and a parameter of the worker objects ("collection of fragments is called the payload" as forming messages using the distributed data within each worker object, and recited "payload header which identifies the location of each

fragment" as a parameter of that worker object; column 4, lines 52 – 67), instantiates a separate communication connection through the communication link and wherein each of the plurality of worker objects includes a set of communication connection parameters that are uniquely configurable to determine the manner in which the data is sent to an underlying layer of the communication link (column 5, lines 18 – 28; and recited "said processor being operable to generate bursts using data received" correlates to programmed to provide a plurality of work objects that each instantiates a separate communication connection through the communication link; column 21, lines 33 – 39; 51 – 65); and wherein the set of communication connection parameters include a time between calls parameter ("sends a timing indicator to TMC indicating the precise time that it can transmit a burst; at specified times of transmission; silence intervals in voice conversations" correlates to a time between calls parameters; column 5, lines 50 – 67; column 6, lines 46 – 51; column 15, lines 21 – 28; column 14, Table I).

Regarding Claim 39, Liebowitz et al. disclose the system of claimed wherein the communication station is a sending communication gateway (Fig 5, elements 1, 2, 3 correlates to sending communication gateway; Fig. 4, column 6, lines 46 – 55).

Regarding Claim 40, Liebowitz et al. disclose the system of claimed wherein the communication station is a receiving communication gateway (element "terminal" correlates to a receiving communication gateway; Fig. 2, column 3, lines 58 – 67).

Regarding Claim 41, Liebowitz et al. disclose the system of claimed wherein each of the separate communication connection using a connection-oriented communication protocol ("to assign a fixed and guaranteed bandwidth to a PVC" correlates to using a connection-oriented communication protocol; Fig. 8, column 16, lines 33 – 42, also "TCP/IP" correlates to separate communication connection using a connection-oriented communication protocol, column 2, lines 22 – 24).

Regarding claim 53, Liebowitz et al. disclose claimed wherein the step of uniquely configuring the set of communication parameters (column 14, Table I) uniquely associated with each of the worker processes includes the steps of configuring a message size parameter for each of the worker processes ("the size of the burst buffer is set by the network-wide parameter, 'packet.length'"; column 4, lines 66 – 68; "formats queue size information, as well as stream request information" correlates to setting a message size parameter; column 6, lines 27 – 33; column 14, table I; "the size of the burst buffer is set by the network-wide parameter"; column 4, lines 66 – 68; "formats queue size information, as well as stream request information" correlates to setting a message size parameter; column 6, lines 27 – 33) and configuring a time between calls parameters for each of the worker processes ("sends a timing indicator to TMC indicating the precise time that it can transmit a burst; at specified times of transmission; silence intervals in voice conversations" correlates to a time between calls parameters; column 5, lines 50 – 67; column 6, lines 46 – 51; column 15, lines 21 – 28).

Regarding Claim 55, Liebowitz et al. disclose the method of claimed wherein the step of uniquely configuring the set of communication connection parameters uniquely associated with each of the worker processes including the steps of configuring the sets of communication connection parameters (column 14, Table I) to provide a reserved bandwidth for retransmission ("transmission capacity provided by the number of slots per time frame which the terminal has permanently reserved" correlates to provide a reserved bandwidth for retransmission ; column 11, lines 41 – 45).

Response to Arguments

6. Applicant's arguments filed 4/30/2007 with respect to claims 1, 3 – 6, 8 – 18, 21 – 32, 34 – 41, 43 – 50, 52 – 57 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan D. Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C. Lee/::<7/04/2007>

EDAN ORGAD
PRIMARY PATENT EXAMINER

Edan Orgad 7/7/07